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| APPLICATION NO. FILING DATE | | NG DATE | FIRST NAMED INVENTOR Clyde C. Lunsford | ATTORNEY DOCKET NO. 11920-1300 | CONFIRMATION NO. 6429 |
|---|------------|------------|---|--------------------------------|-----------------------|
| 09/641,830 | 08/18/2000 | | | | |
| 24504 | 7590 | 07.05.2002 | | | |
| THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP 100 GALLERIA PARKWAY, NW STE 1750 | | | | EXAMINER | |
| | | | | GUARRIELLO, JOHN J | |
| ATLANTA, GA 30339-5948 | | | | | |
| | | | | ART UNIT | PAPER NUMBER |
| | | | | 1771 | |
| | | | | DATE MAILED: 07.05.2002 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. Applicant(s) Applicant(s) | | | | | |
|---|---|--|--|--|--|--|
| Office Action Summary | Examiner 1 Group Art Unit | | | | | |
| | John Gramelo 1927 | | | | | |
| The MAILING DATE of this communication appears | on the cover sheet beneath the correspondence address | | | | | |
| Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO OF THIS COMMUNICATION. | EXPIRE MONTH(S) FROM THE MAILING DATE | | | | | |
| from the mailing date of this communication. | | | | | | |
| Status | | | | | | |
| Responsive to communication(s) filed on | | | | | | |
| This action is FINAL . | | | | | | |
| Since this application is in condition for allowance except for accordance with the practice under Ex parte Quayle, 1935 | or formal matters, prosecution as to the merits is closed in C.D. 1 1; 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| Claim(s) -23 | is/are pending in the application. | | | | | |
| Of the above claim(s) | is/are pending in the application. is/are withdrawn from consideration. | | | | | |
| Claim(s) | is/are allowed. | | | | | |
| l-q | is/are rejected. | | | | | |
| Claim(s) | is/are objected to. | | | | | |
| Claim(s) | are subject to restriction or election requirement. | | | | | |
| Application Papers | | | | | | |
| See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948. | | | | | | |
| The proposed drawing correction, filed on | | | | | | |
| The drawing(s) filed on is/are objected to by the Examiner. | | | | | | |
| The specification is objected to by the Examiner. The oath or declaration is objected to by the Examiner. | | | | | | |
| Priority under 35 U.S.C. § 119 (a)-(d) | | | | | | |
| | or 25 H C C | | | | | |
| Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d). All Some* None of the CERTIFIED copies of the priority documents have been received. | | | | | | |
| received in Application No. (Series Code/Serial Number) received in this national stage application from the Interr | | | | | | |
| *Certified copies not received: | | | | | | |
| Attachment(s) | | | | | | |
| Information Disclosure Statement(s), PTO-1449, Paper No(s) Interview Summary, PTO-413 | | | | | | |
| Notice of Reference(s) Cited, PTO-892 | Notice of Informal Patent Application, PTO-152 | | | | | |
| Notice of Draftsperson's Patent Drawing Review, PTO-948 | Other | | | | | |
| Office | Action Summary | | | | | |

U. S. Patent and Trademark Office PTO-326 (Rev. 9-97)

Part of Paper No.

*U.S. GPO: 1998-454-457/97505

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DETAILED ACTION

Election/Restriction

- 15. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-9, drawn to patterned flame resistant fabric, classified in class 442, subclass 136.
 - II. Claims 10-25, drawn to method for forming a pattern on flame resistant fabric, classified in class 8, subclass 531.
- 16. The inventions are distinct, each from the other because:
- The inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process such as pigment printing which does not require dye assistants.

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- 18. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
- 19. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
- 20. During a telephone conversation with David R. Risley on 6/19/2002 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-9. Affirmation of this election must be made by applicant in replying to this Office action. Claims 10-25 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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21. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 112

22. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

23. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 1, it is not clear what is encompassed by the prhase "non-producer" when it modifies flame resistant fibers, because there is no

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definition for the term cited in the instant specification as filed, so it is indefinite.

In claim 8, lines 1-2, it is not clear where "dye-assistant" is stated in claim 1, this appears to be a lack of clear antecedent basis to claim 1.

In claim 9, lines 1-2, it is not clear where "dye-assistant" is stated in claim 1, for the same reason given for claim 8.

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

25. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stanhope et al. 5,527,597 in view of Cates et al. 4,981,488 and Johnson et al. 4,902,300.

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Stanhope describes flame resistant fabric made from a plurality of warp fibers of a heat resistant material and a plurality of filler fibers, (see abstract; column 2, lines 51-67). Stanhope describes the warp yarns can be made from KEVLAR, like the para isomer of poly(p-phenyleneterephthalmide) which is like para-aramid, or similar polyamide fiber, (column 4, lines 47-55). Stanhope describes other materials can be used such as rayon, acetate and others which can be made flame resistant, (column 4, lines 55-68). Stanhope describes dyeing of fabrics for the desired tint or hue, (column 6, lines 56-68). Stanhope describes a mixture of cellulosic fibers with other flame resistant fibers, (column 4, lines 58-60). Stanhope is silent about color printing in a pattern and flame proofing for materials that are not inherently flame resistant.

Cates describes aramid fabrics which are printed in a camouflage pattern, (column 1, lines 35-38). Cates describes a process of printing fabrics , (column 2, lines 64-68 and column 3, lines 1-14).

Johnson describes simultaneously dyed and flame retardant blends, (see abstract). Johnson describes fabric blends of synthetic and cellulosic

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materials, (column 1, lines 40-65). Johnson describes nylon, which is polyamide, cellulosic materials with flame retardants that improve the flame resistance of fabrics, (column 1, lines 40-65). Johnson describes cyclic phosphonates for imparting flame resistance to cellulosics and are compatible with dye conditions, (column 2, lines 47-68).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the fabric of Stanhope with the flame retardant materials coated/treated cellulosics and phosphonates of Johnson and the printing patterns of Cates motivated with the expectation that the improved blend would be more economically viable and have improved flame resistant and camouflage characteristics for the fabric.

26. Claims 1, 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stanhope in view of Johnson and Riggins et al. 4,898,596.

The features of Stanhope and Johnson are set forth above. However, the patents are silent about dye-assistant agent.

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Riggins describes a dye-assistant agent which is stated as a diffusion promoter useful in aramid fiber fabric dyeing processes, (column 2, lines 45-68). Riggins describes CHP, N-cyclohexyl-2-pyrrolidone, (column 3, lines 50-51), is a diffusion promoter in the dyeing process which appears similar to the dye-assistant of the claimed invention

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the dyeing of Stanhope with the dyeassistant agent (diffusion promoter) of Riggins motivated with the expectation that the improved blend would be more economically viable and have improved flame resistant characteristics for the fabric.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Guarriello whose telephone number is 703-308-3209. The examiner can normally be reached on Monday to Friday from 8 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris, can be reached on (703) 308-2414. The

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fax phone number for the organization where this application or proceeding is assigned is 703-305-5408.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

John J. Guarriello:gj

Patent Examiner

June 24, 2002

June 27, 2002

TERREL MORRIS

PERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700